REMARKS

This is intended as a full and complete response to the Office Action dated March 27, 2006, having a shortened statutory period for response set to expire on June 27, 2006. Please reconsider the claims pending in the application for reasons discussed below.

Claims 1-22 remain pending in the application and are shown above. Claims 17-22 stand withdrawn by the Examiner. Claims 1-16 stand rejected by the Examiner. Claim 10 has been amended to clarify the invention. Applicants submit that no new matter has been introduced in this amendment.

Reconsideration of the rejected claims is requested for reasons presented below.

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. § 121:

I. Claims 1-16, drawn to an apparatus for electroless plating, classified in Class 118, subclass 50+.

II. Claims 17-22, drawn to a method for electroless deposition, classified in Class 427, subclass 304.

Applicants herein affirm the election of Group I with traverse made by Todd Patterson during a telephone conversation with the Examiner on January 5, 2006. Applicants submit that inventions II and I are not distinct. Reconsideration of this restriction requirement is respectfully requested.

Double Patenting

Claim 1 stands provisionally rejected under 35 U.S.C. § 101 as claiming the same invention as that of claim 1 of copending Application No. 10/680,325. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

Applicants respectfully traverse this rejection on the ground that claim 1 of the present invention and claim 1 of copending Application No. 10/680,325 do not claim the same invention. For example, claim 1 of copending Application No. 10/680,325 does not recite "a plurality of turbolaters" which is set forth in claim 1 of the present invention. Withdrawal of this rejection is respectfully requested.

Claim 10 stands provisionally rejected under 35 U.S.C. § 101 as claiming the same invention as that of claim 12 of copending Application No. 10/680,325. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

Applicants respectfully traverse this rejection on the ground that claim 10 of the present invention and claim 12 of copending Application No. 10/680,325 do not claim the same invention. For example, claim 12 of copending Application No. 10/680,325 does not recite "a plurality of turbolaters" which is set forth in claim 10 of the present invention. Withdrawal of this rejection is respectfully requested.

Claim Rejections – U.S.C. § 102

Claims 1-5, 8-12 and 14-16 stand rejected under 35 U.S.C. § 102(b) as being anticipated by *Wen* (U.S. Patent No. 6,239,038, hereafter *Wen*).

Applicants respectfully traverse this rejection.

Wen teaches a method and apparatus for processing semiconductor wafer blanks (Abstract). The Examiner asserts that grooves 62 of *Wen* are turbolators configured to generate a uniform turbulent flow of fluid traveling for a fluid outlet (near the center a substrate) to a perimeter of the substrate. Applicants respectfully submit that *Wen* teaches each of the surface grooves 62 has a plurality of openings 28 and is configured to assure adequate supply of fluid and to provide a fresh supply of fluid to all areas of the wafer bottom surface (Figures 2-3, and column 4 lines 40-45). *Wen* is silent about generating a turbulent flow. Moreover, the surface grooves 62 would not be as effective for generating a turbulent flow as the raised turbolators described and claimed by Applicants. Therefore, *Wen* does not teach or suggest a plurality of turbolators as set forth in the present invention.

Therefore, *Wen* does not teach a fluid processing cell configured to control the temperature of a substrate during processing comprising a substrate support assembly positioned in a processing volume, a disk shaped member positioned in the processing volume in parallel orientation with a substrate supported on the substrate support assembly, a fluid outlet positioned in a central location of the disk shaped member, and a plurality of turbolators positioned on an upper surface of the disk shaped member, the turbolators being configured to generate a uniform turbulent flow of fluid traveling from the fluid outlet to a perimeter of the substrate, as recited in claim 1 and claims dependent thereon. Therefore claim 1-5 and 8-9 are believed to be in condition for allowance. Withdrawal of this rejection is respectfully requested.

Regarding claim 10, *Wen* does not teach or suggest a plurality of turbolators as recited in claim 10. Additionally, *Wen* does not teach or suggest an electroless fluid dispensing member positioned to dispense an electroless solution onto a frontside of the substrate. The Examiner asserts that *Wen* that a fluid entry opening 34 is an electroless fluid dispensing member. In fact, *Wen* teaches that the fluid entry opening 34 is configured to dispense a flow of cleaning chemicals to the top surface of the substrate (Column 4 lines 19-21), wherein the top (upper) surface is not for contruction of integrated circuitry (Column 3 lines 31-34). Therefore, the fluid entry opening 34 of *Wen* is configured to supply cleaning fluid to the backside of a substrate.

Therefore, *Wen* does not teach an electroless deposition cell for semiconductor substrates comprising a substrate support assembly positioned in a cell body, a fluid distribution member in parallel relationship with a substrate positioned on the substrate support assembly, a plurality of turbolators positioned on the fluid distribution member, a fluid delivery aperture formed into a central portion of the fluid distribution member and configured to dispense a heating fluid onto a backside of the substrate, wherein the plurality of turbolators are configured to generate a uniform turbulent flow of fluid traveling from the fluid delivery aperture to a perimeter of the fluid distribution member, an electroless fluid dispensing member positioned to dispense an electroless processing solution onto a frontside of the substrate, and a source of heated fluid in fluid communication with the fluid delivery aperture, as recited in claim 10 and claims dependent thereon. Therefore claims 10-12 and 14-16 are believed to be in condition for allowance. Withdrawal of this rejection is respectfully requested.

Claims 1 and 10 stand rejected under 35 U.S.C. § 102(a) as being anticipated by *Stevens et al* (U.S. Publ. No. 2003/0118732, hereafter *Stevens*).

Applicants respectfully traverse the rejection.

Stevens discloses a method and apparatus for plating substrates (Abstract). The Examiner asserts that elements 226 of *Stevens* are a plurality of turbolators. Applicants respectfully submit that elements 226 of *Stevens* are vacuum grooves or apertures in communication with a vacuum port 224 for the purpose of distributing the vacuum chucking forth (Paragraph [0025]). *Stevens* like *Wen*t does not teach or suggest a plurality of turbolators as set forth in the present invention.

Therefore, *Stevens* does not teach a fluid processing cell configured to control the temperature of a substrate during processing comprising a substrate support assembly positioned in a processing volume, a disk shaped member positioned in the processing volume in parallel orientation with a substrate supported on the substrate support assembly, a fluid outlet positioned in a central location of the disk shaped member, and a plurality of turbolators positioned on an upper surface of the disk shaped member, the turbolators being configured to generate a uniform turbulent flow of fluid traveling from the fluid outlet to a perimeter of the substrate, as recited in claim 1.

Stevens also does not teach an electroless deposition cell for semiconductor substrates comprising a substrate support assembly positioned in a cell body, a fluid distribution member in parallel relationship with a substrate positioned on the substrate support assembly, a plurality of turbolators positioned on the fluid distribution member, a fluid delivery aperture formed into a central portion of the fluid distribution member and configured to dispense a heating fluid onto a backside of the substrate, wherein the plurality of turbolators are configured to generate a uniform turbulent flow of fluid traveling from the fluid delivery aperture to a perimeter of the fluid distribution member, an electroless fluid dispensing member positioned to dispense an electroless processing solution onto a frontside of the substrate, and a source of heated fluid in fluid communication with the fluid delivery aperture, as recited in claim 10.

Withdrawal of this rejection is respectfully requested.

Claim Rejections – U.S.C. § 103

Claims 6-7 and 13 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Wen* in view of *Biberger et al* (U.S. Publ. No. 2002/0046707, hereafter *Biberger*).

Applicants respectfully traverse the rejection.

Wen is discussed above. *Wen* does not teach each and every element set forth in claims 1 and 10 on which claims 6-7 and 13 are dependent.

Biberger teaches a high pressure chamber comprises a chamber housing, a platen and a mechanical drive mechanism (Abstract). The Examiner indicates that *Biberger* teaches numbers and sizing of turbolators on paragraph 0044. In fact, the cited paragraph is directed to using a different size of vacuum grooves 100 to accommodate a different size of substrate. *Biberger* like *Wen* does not teach or suggest a turbolator.

Therefore, the combination of *Wen* and *Biberger* does not teach or suggest the claimed invention set forth in claims 1 and 10, on which claims 6-7 and 13 are dependent. Claims 6-7 and 13 are believed to be in condition for allowance. Withdrawal of the rejection is respectfully requested.

In conclusion, the references cited by the Examiner, alone or in combination, do not teach, show, or suggest the invention as claimed.

The secondary references made of record are noted. However, it is believed that the secondary references are no more pertinent to the Applicant's disclosure than the primary references cited in the office action. Therefore, Applicant believes that a detailed discussion of the secondary references is not necessary for a full and complete response to this office action.

Having addressed all issues set out in the office action, Applicant respectfully submits that the claims are in condition for allowance and respectfully request that the claims be allowed.

Respectfully submitted,

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